

Review of publication: Prevalencia de las Infecciones Nosocomiales en los Hospitales Españoles EPINE 1990-1994

This publication, in Spanish, is the third in a series of books which gives a detailed description and analysis of the results of five annual prevalence surveys of hospital-acquired infection in many Spanish hospitals. The comprehensive surveys were organized, and the book published, by a working group of the Spanish Society of Hospital Hygiene and Preventive Medicine (Sociedad Española de Higiene y Medicina Preventiva Hospitalarias).

These prevalence surveys started in 1990 with 125 acute hospitals, and a total of 38,489 patients. By 1994 the number of participating hospitals increased to 186, with a total of 49,689 patients.

Several findings of these surveys will be of interest to other European countries. The data were collected simultaneously in each hospital during the first 2 weeks of May, every year, with an additional 2 weeks for internal validation of the data. The use of standard definitions of hospital-acquired infection, based on those of the Centers for Disease Control, and the standard protocols, together with the involvement of relatively large teams (drawn mostly from the Preventive Medicine Department, but also in many hospitals with the participation of other departments such as microbiology, infectious disease or internal medicine), has facilitated the surveillance of 100% of the patients in each hospital in 1 month. Following central analysis of the national data, each hospital receives feedback on its own prevalence analyzed by infections, infected patients, department, anatomic site, causative microorganism, antimicrobial use, risk factors etc. The local data are useful for targeting hospital infection control and incidence-surveillance programs to infections of high prevalence. Also, the data have proved useful for local quality assurance programs.

The consistency of definitions and protocols and the annual periodicity is very useful for the analysis of trends in hospital-acquired infection. Analysis of national data over the past 5 years shows an average annual decrease of 4.1% in the prevalence of patients with hospital-acquired infection. In the last two prevalence surveys, in 1993 and 1994, no reduction was discernible, suggesting that the 'irreducible minimum of hospital-acquired infection' may have been reached. The greatest reductions were achieved for urinary tract and surgical wound infection. Bacteremia tends to decrease, but not statistically significantly, and the prevalence of lower respiratory tract infections did not change during the 5 years.

The limitations of this study are partially due to the characteristics of any prevalence study. For example, data from small hospitals or small units are difficult to interpret. In this Spanish study, several issues remain unresolved, such as the lack of external validation of the data, identifying exactly the services in which some infections were acquired, the possible confounding effect of the difference in length of stay and, inevitably, the occasional incompleteness of the questionnaire data, and the dependence on industrial financial support to sustain the program.

The information in this book gives evidence, albeit in Spain, that, with proper organization, agreed definitions and protocols, large enough surveillance teams (which are not exclusively infection control doctors and nurses), centralized analysis and adequate computer technology, repeated national surveillance programmes can be quick, practicable, feasible and useful.

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